

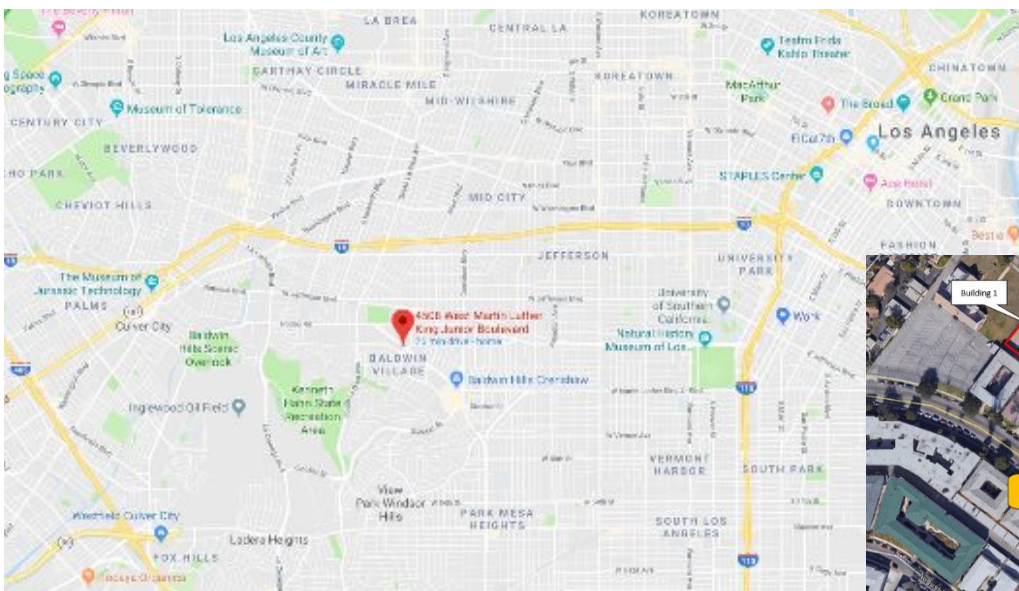
LARGE MULTIFAMILY SEISMIC CASE STUDY

Financing Community Resilience
Displacement, Climate and Earthquakes

October 1, 2018 | Federal Reserve | Los Angeles, CA

Purpose

The purpose of this case study is to use a real example of seismic vulnerability in Los Angeles to explore innovative solutions for financing mandatory retrofits and mitigating displacement pressures. The large multifamily housing complex in this study, the West Angeles Parklane Apartments, are three rent-controlled, soft story buildings owned by a community development corporation in a low-income community of color. The buildings do not comply with City of Los Angeles Department of Building and Safety (LADBS) or U.S. Department of Housing and Urban Development (HUD) seismic standards. The goal of this case study is to find a way to finance mandatory retrofits without displacing or creating hardship for existing residents, and to increase the resilience of the owners and tenants, therefore advancing both building and social resilience.



Context

- **Owner:** West Angeles CDC (WACDC) was founded in 1994 as an outreach program of West Angeles Church. The church decided to expand into neighborhood development in order to “face the mounting problems of poverty and injustice in the surrounding community,” including a “lack of jobs, business investment and affordable, decent housing, struggling schools, endemic homelessness and gang activity.” WACDC owns and operates the West Angeles Parkland Apartments.

Common challenges for most affordable housing developers include limited financing available for development, preservation and ongoing maintenance, including for case management and services for residents (particularly those with special needs or high-acuity homeless populations); staffing, particularly “building the bench” for real estate development positions, long-term retention of real-estate development staff, and retaining institutional knowledge; having enough capacity for meaningful engagement and outreach for projects, particularly with the strong NIMBYism in communities and the deeper coordination and thoughtfulness that requires.

- **Property:**
 - **Building:** The West Angeles Parklane Apartments is multi-family rental property containing 117 units. The building features one, two, and three-bedroom units. In addition to a complete building retrofitting, redevelopment efforts included increasing unit square footage as well as the number of three bedroom units. Other amenities added to Parklane include: a computer facility, youth recreational space, barbeque pits, a clubhouse that includes a modern kitchenette, a television, and a DVD player. The apartments are contained in three identical soft-story buildings that are two-stories tall. Each buildings features a central open courtyard and two passageways connect the buildings together. The main entrances are from MLK Jr. Boulevard.
 - The development is pursuing refinancing so that West Angeles CDC can close out the original limited liability partnership and attain 100% ownership as part its Year 15 transition. Completing deferred maintenance and installing energy efficient systems to keep the development in high quality are a need. Further, West Angeles CDC would like to perform analysis establishing the feasibility of participating in LA Department of Water and Power’s tariff agreement structure, enabling Parklane to earn income by selling surplus electricity back to the City. Anticipated positive organizational impacts resulting from this project are: 1) improved energy efficiency rating on annual audits of our multi-family structures; 2) increased compliance with Title 24 requirements; 3) efficiency in replication of procedures and establishment of policies for green energy systems for future projects; 4) reinvestment of savings into other Parklane site amenities or services; and 5) an ROI over a 15-year timeline in the form of utility savings that exceeds direct up-front installation cost estimated at \$525,000.

- **Location:** 4630, 4600, 4508 West Martin Luther King Jr. Blvd, Los Angeles, CA 90016
 - **Year built:** 1956
 - **Construction type:** large-multi family residential (building class: D6)
 - **Number of stories:** 2
 - **Total square footage:** 120,726 sq ft total (40,242 sq ft each building)
 - **Site area:** 28,847.1 sq ft total
 - **Accessibility Upgrades needed:** Yes: a total of 6 accessible units are required to meet code for mobility and 2 are required with sensory communication features for each building (e.g. for vision or hearing challenges), but currently none of the apartment units are accessible for mobility or provide communication features; 4 parking spaces are also required to be accessible.
 - **Energy Efficiency:** energy efficiency retrofits in progress, including: energy efficient roof installation; energy efficient lights in common areas; low-flow, energy efficient showerheads, kitchen aerators and bathroom aerators.
 - **Presence of AC:** only 1% of households in the census tract have AC units
 - **Transit:** in a Transit Priority Area, TOC Tier 3 (within 750 ft. of a BRT station and/or 2640 ft. of a Metro Rail station)¹
- **Tenants:** All residents with exception of the property manager are low- income families, with 80% AMI or below, and the property sustains a 100% occupancy rate. Many families with young children live in this building; 10% of residents are children under 5. In addition, 10% of residents are elderly people over 65, including 3% elderly living alone. 39% of residents are extremely rent burdened, meaning they pay at least 50% of their household income on rent. The median household income is \$23,000 and 27% of households are below the County poverty level. Linguistic isolation is relatively high as 20% of households lack an English speaker. Many residents are transit dependent, as a third of residents do not own a vehicle; however, there are bus lines located directly outside the property on MLK Blvd and the Expo Line Farmdale station is only half a mile away.²
 - **Neighborhood:** The property is located in the Baldwin Village neighborhood of South LA—otherwise known as “The Jungle”—a community subject to decades of disinvestment, militarized policing and severe public health hazards. In addition, the neighborhood is adjacent to the Inglewood Oil Fields—the largest urban oil fields in the country—and was identified by the CA Dept of Public Health as the most climate vulnerable census tract in LA County.³ The neighborhood has a high proportion of low-income residents and children. Historically, Baldwin Village has had a majority Black/African American population; however, like many other South LA neighborhoods, there has been a demographic shift in the last few decades toward more Latino families.

¹ Building information collected from the LA Department of City Planning “Zone Information and Map Access System,” [ZIMAS](#)

² This data is hypothetical for the building, based on American Community Survey, US Census

³ CA Dept of Public Health, [Climate Change Vulnerability study](#), 2015

- **Displacement risk:** According to the Los Angeles Index of Displacement Pressure, displacement risk in this neighborhood is “Very High.”⁴

Seismic

- **Seismic context:** The buildings sits 1.5 km from the nearest fault—The Newport-Inglewood Fault Zone. The slip rate is approximately 1 mm per year, the soil type is stiff, and the maximum magnitude estimate is 7.1. The property is not in an Alquist-Priolo Act Fault, Landslide or Tsunami Inundation Zone; however, it is located in a Liquefaction Zone.
- **Renovation Plan:** None of the buildings comply with LADBS mandatory retrofit (LAMC Ordinance 183893) or HUD (Appendix 5C) requirements. A Voluntary Seismic Reinforcement of the parking areas was completed in 2003, but does not comply with standards. The following items were found to be HUD non-compliant: shear stress check; stucco shear walls; gypsum wallboard sheer walls; walls connected through floors; cripple walls; wood posts; and spans. The following items were found to be LADBS non-compliant: Steel Moment Frame Drift; Steel Moment Frame Member Capacity; Steel Moment Frame Anchorage to Foundation; and Steel Braced Frame Anchorage to Foundation.⁵
- **Cost + Timeline for Renovation Plan:** The estimated cost to achieve HUD compliance is \$544,000 per building, or \$1.6 million for the entire property, which is expected to take approximately 1 year. The estimated cost to achieve LADBS compliance is \$500,000 for the entire property, which will take about six months; in order to satisfy the mandatory retrofit Ordinance, a permit must be obtained by October 26, 2019, and construction must be completed by May 26, 2023.⁶

⁴ [LA Index of Displacement Pressure and Neighborhood Change](#)

⁵ Partner Engineering and Science, Inc, 2018, “Limited Structural Evaluation for Park Lane Apartments”

⁶ Ibid

| Agency | Retrofit needs | Estimated cost | Timeline |
|--------------------------------------|--|---------------------------|----------|
| HUD (Appendix 5C) | Crawl space retrofit (LAMC Chapter 92) | \$162,000 | |
| | Exterior walls (plywood sheathing) | \$1,200,000 | |
| | Interior walls (plywood sheathing) | \$360,000 | |
| | Retrofit drawings and permitting | \$12,000 | |
| | | Total: \$1,734,000 | 1 year |
| LADBS (LAMC Ordinance 183893) | Retrofit drawings and permitting | \$14,000 | |
| | Construction costs | \$500,000 | |
| | | Total: \$514,000 | 6 months |

Climate-Smart Cities, Los Angeles

Parcel Report

September 27, 2018

Page 1 of 3

THE TRUST FOR PUBLIC LAND

Parcel ID: 5046039039

Owner: PARK LANE APARTMENTS LP

Acres: 0.87

Address: 4508 W MARTIN LUTHER KING JR BLVD LOS ANGELES CA 90016 5965

Administrative Boundaries:

State Assembly District: District 54

Senate Assembly District: District 30

Los Angeles Neighborhood Council Boundary: EMPOWERMENT CONGRESS WEST AREA NDC

Public Owned: No

Green Infrastructure Suitability Indicators

Canopy Cover Minimum (%): 0.00

Canopy Cover Maximum (%): 10.00

Canopy Cover Mean (%): 7.44

Impervious Surface Minimum (%): 59.00

Impervious Surface Maximum (%): 91.00

Impervious Surface Mean (%): 69.34

Parking Lot (sq. ft.): 0.00

Available Solar (sq.ft.): 6775.00

Cal EnviroScreen Ozone: 0.01

Cal EnviroScreen Ozone (%): 25.43

Cal EnviroScreen Particulate Matter: 14.68

Cal EnviroScreen Particulate Matter (%): 81.89

Cal EnviroScreen Toxic Releases: 2300.65

Cal EnviroScreen Toxic Releases (%): 74.06

Cal EnviroScreen Traffic Density: 778.91

Cal EnviroScreen Traffic Density (%): 44.85

Cal EnviroScreen Asthma: 82.10

Cal EnviroScreen Asthma (%): 91.97

Cal EnviroScreen Low Birth Weight: 0.05

Cal EnviroScreen Low Birth Weight (%): 81.95

Cal EnviroScreen Pollution: 48.86

Cal EnviroScreen Pollution Score (1-10): 4.89

Cal EnviroScreen Pollution (%): 72.45

Cal EnviroScreen Population: 70.69

Cal EnviroScreen Population Score (1-10): 7.07

Cal EnviroScreen Population (%): 84.40

Cal EnviroScreen Score Pct Range: Top 15%

Cal EnviroScreen Score: 34.54

USC PERE EJ Scrn. Cum. Impact Score: 10.00

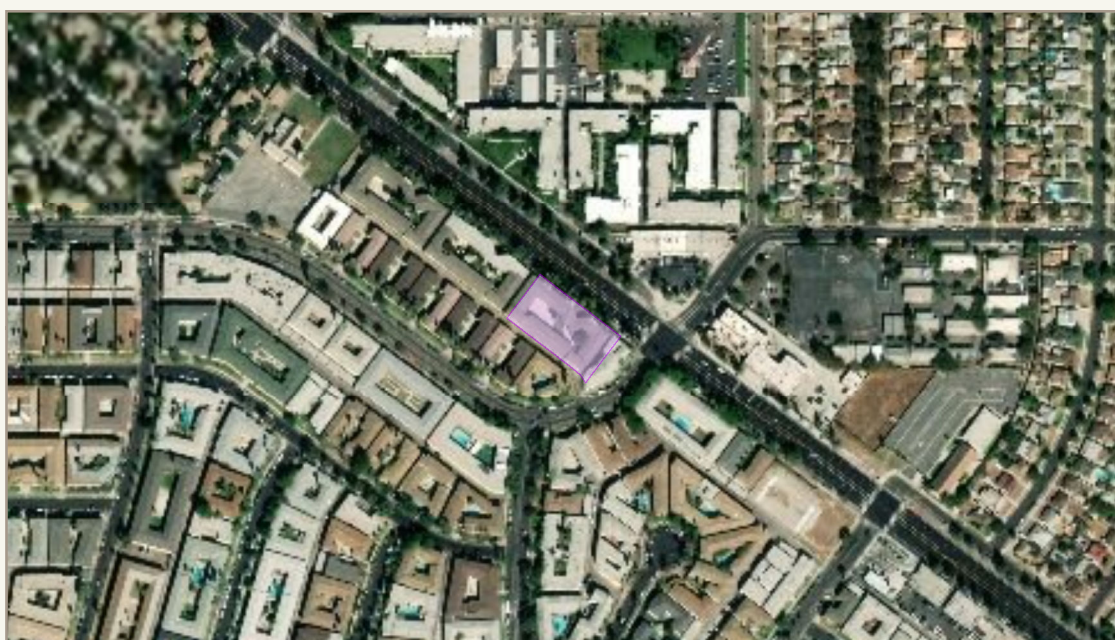
USC PERE EJ Scrn. Cum. Imp. Vuln. Ind. Score: 15.00

Park Need Assessment Results: High

Vacant: No

Legend

 Los Angeles Parcels



This report was created on September 27, 2018 using the Climate-Smart Los Angeles interactive mapping site. It is for informational purposes only. The providers of this report disclaim any and all warranties, express or implied, including fitness for a particular purpose or merchantability, and make no representation that the report is complete, accurate, or error free. Use and reliance on this report is at the sole risk of the party using same.

© 2016 The Trust for Public Land.

Climate-Smart Cities, Los Angeles

Parcel Report

September 27, 2018

Page 2 of 3



Parcel ID: 5046039039 Owner: PARK LANE APARTMENTS LP Acres: 0.87
 Address: 4508 W MARTIN LUTHER KING JR BLVD LOS ANGELES CA 90016 5965

AB31 Criteria:

Acres of Park per 1k Residents: 1.84
 Median Household Income <80%: Yes
 Less than 3 acres Park per 1k Residents: Yes

| Overall Stacked Priorities | Acres | Percent | Present |
|----------------------------------|-------------|--------------|------------|
| Stacked Priorities | 0.86 | 98.8% | Yes |
| Goal: Cool | Acres | Percent | Present |
| Daytime Urban Heat Islands | 0.87 | 100.0% | Yes |
| Nighttime Urban Heat Islands | 0.00 | 0.0% | No |
| Cool Priority Areas | 0.00 | 0.0% | No |
| Goal: Absorb | Acres | Percent | Present |
| Riparian Areas | 0.00 | 0.0% | No |
| Flood Prone Areas | 0.00 | 0.0% | No |
| Permeable Soils | 0.00 | 0.0% | No |
| Spreading Grounds | 0.00 | 0.0% | No |
| Wetland Areas | 0.00 | 0.0% | No |
| Lakes and Ponds | 0.00 | 0.0% | No |
| Groundwater Forebay | 0.00 | 0.0% | No |
| Groundwater Basin | 0.87 | 100.0% | Yes |
| Absorb Priority Areas | 0.00 | 0.0% | No |
| Goal: Protect | Acres | Percent | Present |
| Coastal High Hazard Areas | 0.00 | 0.0% | No |
| Projected Storm Inundation Areas | 0.00 | 0.0% | No |
| Cliff Erosion Areas | 0.00 | 0.0% | No |
| Shoreline Change | 0.00 | 0.0% | No |
| Flood Prone Areas | 0.00 | 0.0% | No |
| Protect Priority Areas | 0.00 | 0.0% | No |

Climate-Smart Cities, Los Angeles

Parcel Report

September 27, 2018

Page 3 of 3



Parcel ID: 5046039039 Owner: PARK LANE APARTMENTS LP Acres: 0.87
 Address: 4508 W MARTIN LUTHER KING JR BLVD LOS ANGELES CA 90016 5965

| Goal: Connect | Acres | Percent | Present |
|---|-------------|---------------|------------|
| Connect Low-Income Communities to Job-Rich Districts | 0.86 | 98.8% | Yes |
| Connect Low-income Communities to Shopping Centers and Medical Facilities | 0.86 | 98.8% | Yes |
| Connect Low-income Communities to High Quality Transit | 0.87 | 100.0% | Yes |
| Connect High Bike/Walk Communities to Job-Rich Districts | 0.00 | 0.0% | No |
| Connect High Bike/Walk Communities to Shopping Centers and Medical Facilities | 0.00 | 0.0% | No |
| Connect to the LA River Sustainable River Revitalization Projects | 0.00 | 0.0% | No |
| Provide Access to Public Schools | 0.53 | 60.4% | Yes |
| Provide Access to Colleges and Universities | 0.01 | 1.2% | Yes |
| First Last Mile Walkable Areas | 0.87 | 100.0% | Yes |
| Connect Priority Areas | 0.86 | 98.8% | Yes |
| Goal: Equity | Acres | Percent | Present |
| Populations with People of Color | 0.87 | 100.0% | Yes |
| Low-Income Populations | 0.87 | 100.0% | Yes |
| Populations with Less than High School Diploma | 0.00 | 0.0% | No |
| Populations with Linguistic Isolation | 0.00 | 0.0% | No |
| Populations under 5 | 0.87 | 100.0% | Yes |
| Populations over 64 | 0.00 | 0.0% | No |
| Populations with Unemployment | 0.87 | 100.0% | Yes |
| Populations with Asthma | 0.87 | 100.0% | Yes |
| Populations with Low Birth Weight | 0.87 | 100.0% | Yes |
| Equity Priorities | 0.87 | 100.0% | Yes |